



**CTEH® Project #40442**  
**West Fertilizer Plant Explosion**  
**Summary of Air Monitoring Results**  
**April 25, 2013 07:00**

This data report discusses real-time air monitoring data collected between 4/24/2013 04:00 and 4/25/2013 04:00 in support of remediation operations conducted near the West Fertilizer Plant Explosion in West, TX.

Real-time air monitoring was conducted for VOCs, ammonia (NH<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), percent of the lower explosive limit (LEL) and oxygen (O<sub>2</sub>) using remote-telemetry RAESystems® AreaRAEs and hand-held instruments such as the RAESystems® MultiRAE.

Tables 1 and 2 (below) display data summaries for hand-held and AreaRAE instruments, respectively. Site maps and charts are available as attachments.

**Table 1: Hand-held Real-time Air  
Monitoring Summary<sup>1</sup>**  
**April 24, 2013 04:00 – April 25, 2013 04:00**

Analyte	Instrument	Number of Readings	Number of Detections	Average of Detections	Range of Detections
Work Area					
VOC	MultiRAE	2	1	0.1 ppm	0.1 ppm

<sup>1</sup>Please note: The data displayed here has not undergone complete QA/QC analysis and is presented in a preliminary format.  
PPM = Parts Per Million

**Table 2**  
**Stationary AreaRAE Monitoring Stations Data Logged**  
**4/24/2013 04:00 to 4/25/2013 16:00**

Unit	Analyte	Count of Readings	Count of Detections	Average of Detections	Max Detection
AR13	LEL	5563	0	NA	< 1 %
	NH3	5563	0	NA	< 1 ppm
	NO2	5563	0	NA	< 0.1 ppm
	O2	5563	5563	20.9 %	20.9 %
	VOC	5563	566	0.1 ppm	0.2 ppm
AR14	LEL	4940	0	NA	< 1 %
	NH3	4940	0	NA	< 1 ppm
	NO2	4940	47	0.1 ppm	0.2 ppm
	O2	4940	4940	20.9 %	21.3 %
	VOC	4940	0	NA	< 0.1 ppm
AR16	LEL	4764	0	NA	< 1 %
	NH3	4764	0	NA	< 1 ppm
	NO2	4764	0	NA	< 0.1 ppm
	O2	4764	4764	20.9 %	21.1 %
	VOC	4764	0	NA	< 0.1 ppm
AR17	LEL	5499	0	NA	< 1 %
	NH3	5499	0	NA	< 1 ppm
	NO2	5499	0	NA	< 0.1 ppm
	O2	5499	5499	21.1%	21.4 %
	VOC	5499	1	0.1 ppm	0.1 ppm
AR18	LEL	5007	0	NA	< 1 %
	NH3	5007	0	NA	< 1 ppm
	NO2	5007	0	NA	< 0.1 ppm
	O2	5007	5007	21.1 %	21.5 %
	VOC	5007	0	NA	< 0.1 ppm

<sup>1</sup> The data in this table may include electronic drift. Drift is defined as any interference in the electrochemical sensor's ability to accurately report the concentration of a chemical in the atmosphere. Humidity and temperature changes throughout the monitoring period are typical sources of drift. Additionally, the data has not undergone complete QAQC as of this time.



CENTER FOR TOXICOLOGY  
AND ENVIRONMENTAL HEALTH, LLC

# Appendix



## Air Monitoring Zone Classifications<sup>1</sup> April 25, 2013

Project: 40442  
Client: OMI  
City: West, TX  
County: McLennan





## AreaRAE Monitoring Station Locations 4/18/2013 to 4/25/2013

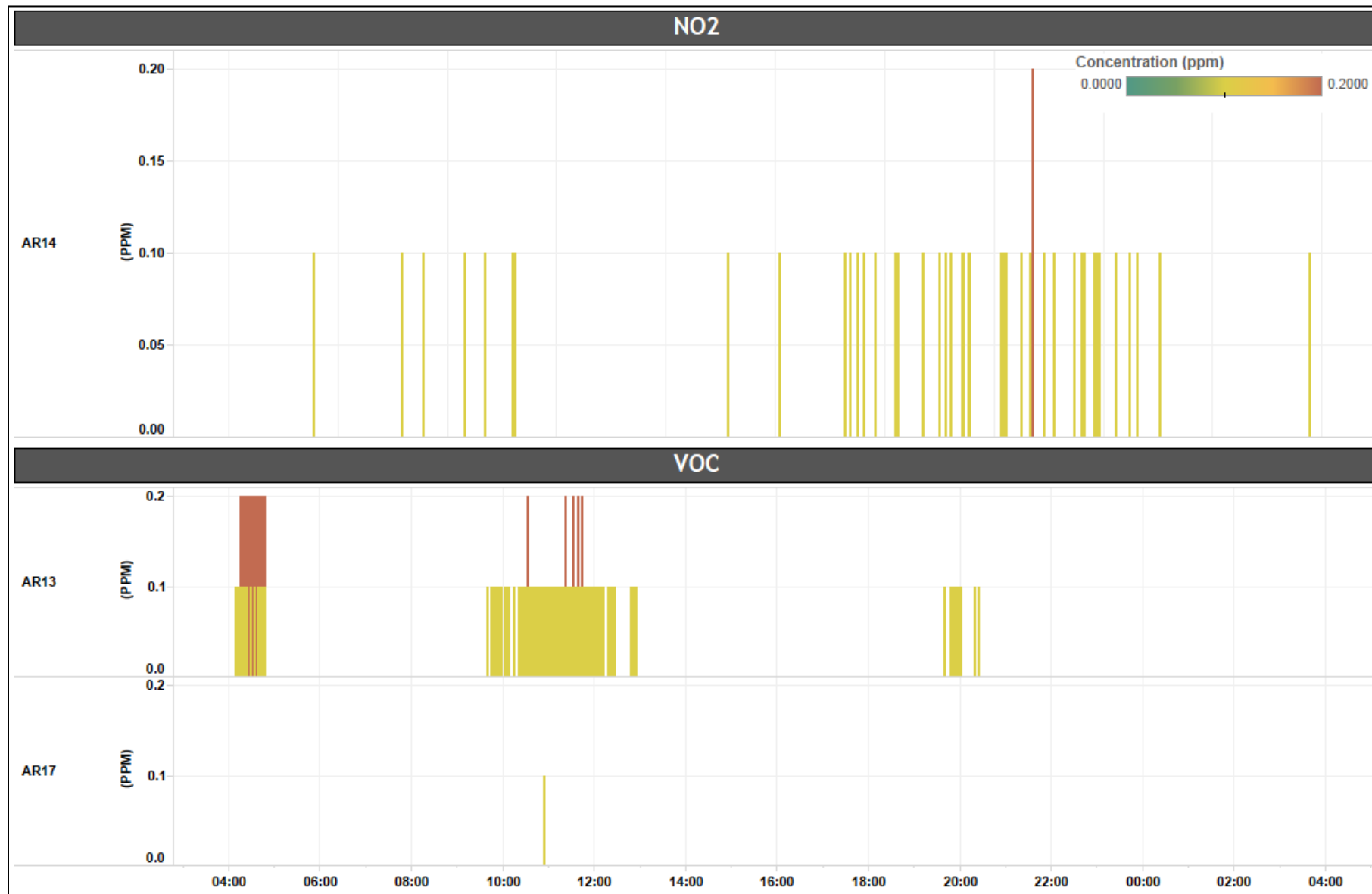
Project: 40442  
Client: OMI  
City: West, TX  
County: McLennan







**AreaRAE Detections**  
**4/24/2013 04:00 to 4/25/2013 04:00**

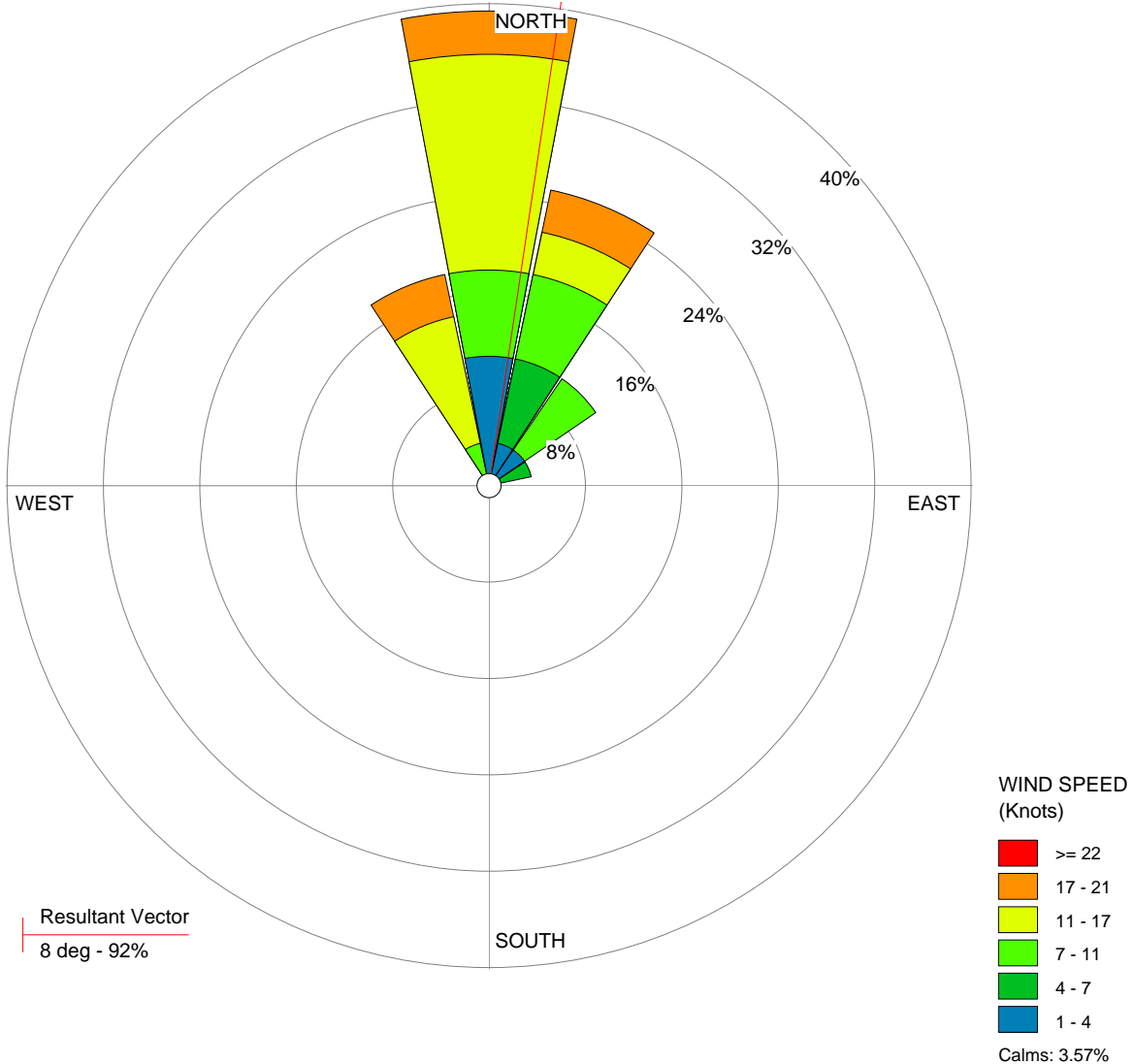


WIND ROSE PLOT:

**Wind Speed and Direction 4/24/2013 04:00 to 4/25/2013 04:00**  
**West, Tx**

DISPLAY:

**Wind Speed**  
**Direction (blowing from)**



COMMENTS:

Met Station: KACT Waco, TX

COMPANY NAME:

**CTEH**

MODELER:

**Jason Callahan**



CALM WINDS:

**3.57%**

AVG. WIND SPEED:

**10.07 Knots**

PROJECT NO.:

**40442 - OMI**